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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DIVECHA, KAMAL B	

ART UNIT	PAPER NUMBER
2451	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/913,885	TISSERAND ET AL.	
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7,10-12 and 16-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7,10-12 and 16-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Action is in response to communications filed 9/23/09.

Claims 1-2, 7, 10-12 and 16-21 are pending in this application.

Claims 8-9 were previously withdrawn.

Claims 3-6 and 13-15 are cancelled in the communications filed 9/23/09.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/23/09 has been entered.

Response to Arguments

Applicant's arguments filed in the communications above have been fully considered but they are not persuasive.

In the communications filed, applicant argues in substance that:

a. Lindsay does not disclose...the process wherein the termination step is being triggered/initiated by the communication of the user message" (remarks, pg. 9) and Ranta also does not disclose "responsive to transmitting the signaling message, discontinuing the attempt to establish the connection between the mobile terminal and the external device (remarks, pg. 10).

In response to argument [a], Examiner respectfully disagrees.

Initially, Lindsay discloses activating a request to set up a call channel, performing a signaling stage including sending the signaling message and terminating the set up of the call channel at any time by the user and/or by the base station, as evidenced by the following figure.

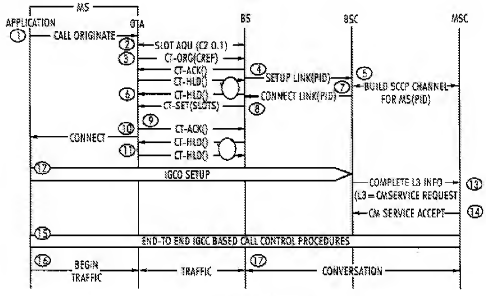

Fig. 9
MOBILE CALL ORIGINATION

In other words, the application at the mobile station originates the call set-up procedure by initiating the call originate request.

The "call originate" request (col. 20 L41 to col. 21 L12) comprises:

TABLE 10-4

Call Origination (CT-ORG)

Information Element	Length in Bits
Message Type	8
Service Request	32
Key Sequence Number	8
Class	16
CREF	8
Reserved	88

The user station **102** sends a Call Originate (CT-ORG) control traffic message to the base station **104** to request the placement of an outgoing call.

The Service Request information element of the CT-ORG message indicates such things as data versus voice service, use of CRC and ARQ, symmetry or asymmetry of the channel, whether service resources are being requested, and frame rate, for example. The Key Sequence Number information element is used to generate a communication key in both the base station **104** and the user station **102** without having to explicitly pass the key over the air. The Class information element specifies some of the operational parameters of the particular type of user station **102**. The Class information element can be broken down into subfields of Class Type and Class Information. The Class Type

In other words, the call request message includes various user messages such as service request information comprising data versus voice service, CRC, ARQ, service resources requested, frame rate, etc.

Lindsay also discloses releasing control traffic message for releasing the connection in progress or during link setup process. In releasing the connection in progress or during link set-up, the cause information element for the CT-REL message indicates whether the release was initiated by the network or whether an authentication rejection occurred, e.g. col. 24 L30-50.

Stated another way, the call set-up and/or link set-up procedure can be released and/or discontinued responsive to some network event or **responsive to the occurred authentication rejection.**

As such, the system is configured to terminate and/or discontinue the call or link set-up procedure responsive to sending the initial call set-up message and in response to occurrence of the authentication rejection at the base station.

However, Lindsay does not disclose placing the user information in a spare field of a signaling message.

Ranta explicitly discovered and/or invented the usage of spare fields in the signaling messages for transmitting the information therein, as evidenced by the following figure.

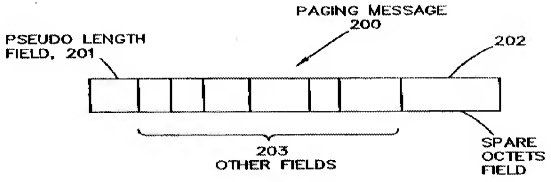

FIG. 2

Ranta further discloses the process of transmitting the information on this spare octet field, e.g. col. 2 L41-58.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta in order to send the user information/message originating at a mobile terminal in the spare field of the paging message, i.e. signaling message.

One of ordinary skilled in the art would have been motivated for the reasons set forth in the rejection.

In the remarks filed 5/13/09, e.g. pg. 7, applicant admits that "Ranta discloses that the base station can transmit other information in parts of a paging channel". However, argues that "such paging channel information or other information that is communicated on a broadcast channel cannot properly be equated with a user message that originates at a terminal rather than a base station".

In response to applicant analysis, it should be noted that if a base station can transmit the other information in a spare field of a signaling message, than, there is no reason why cant a mobile station transmit the user message in the spare field of the signaling message. See MPEP 2144.04 VI (A). [A. Reversal of Parts: In re Gazda, 219 F.2d 449, 104 USPQ 400 (CCPA 1955) (Prior art disclosed a clock fixed to the stationary steering wheel column of an automobile while the gear for winding the clock moves with steering wheel; mere reversal of such movement, so the clock moves with wheel, was held to be an obvious expedient.)].

For the at least these reasons, the combination of Lindsay and Ranta discloses the functionality as set forth above. The rejection is maintained, and all prior responses are herein incorporated by reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-2, 7, 10-11, 16-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al. (hereinafter Lindsay, US 6,301,242 B1) in view of Ranta (U. S. Patent No. 6,775,259 B1).

As per claim 1, Lindsay discloses a method of sending signaling messages through a transmission network (fig. 1-2), comprising:

- generating, in a mobile terminal, a signaling message as part of an attempt to establish a connection between the mobile terminal and an external device through a transmission network, the signaling message including data field that initially includes data and spare field that initially does not include data (col. 17

L11-30: spare field, col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);

- transmitting the signaling message to the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1); and
- responsive to transmitting the signaling message, discontinuing the attempt to establish the connection between the mobile terminal and the external device (col. 24 L30-50: releasing the connection in progress or during link set-up in response to network or authentication rejection occurrence, col. 27 L36 to col. 28 L26, col. 30 L66 to col. 31 L24: terminating the call during and/or prior of the establishment of the call channel).

However, Lindsay does not disclose the process of placing a user message (i.e. information) in a spare field of a generated signaling message, including the user message placed in the spare field that initially does not include data, a parameter that indicates that the user message has been placed in the spare field.

Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order

to place information and/or user message in a spare field of signaling message and terminate the set-up of the call channel once the user message has been communicated.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message (Ranta, col. 2 L13-25).

As per claim 2, Lindsay-Ranta discloses the process wherein the user message is stored in a dedicated memory of the mobile terminal, the method further comprising the mobile terminal receiving a command (such as call origination command) and responsive to receiving the command, the mobile terminal reading the user message from the dedicated memory and placing the user message in the spare field of the signaling message (Lindsay: col. 20 L40 to col. 21 L11; Ranta: col. 6 L3-28).

As per claim 7, Lindsay-Ranta discloses the process wherein the user message is communicated in an enciphered form (i.e. encrypted, col. 20 L1-40).

As per claim 10, Lindsay discloses a method of sending signaling messages through a transmission network (fig. 1-2), comprising:

- generating, in a mobile terminal, a signaling message as part of an attempt to establish a connection between the mobile terminal and an external device through a transmission network, the signaling message including data field that initially includes data and spare field that initially does not include data (col. 17 L11-30: spare field, col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);

- transmitting the signaling message to the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);
- receiving a reply message from the external device in reply to the transmitted signaling message (col. 19 L33-57: ACK message, col. 26 L1-30: ACK messages); and
- responsive to receiving the reply message, discontinuing the attempt to establish the connection between the mobile terminal and the external device (col. 24 L30-50: releasing the connection in progress or during link set-up in response to network or authentication rejection occurrence, col. 27 L36 to col. 28 L26, col. 30 L66 to col. 31 L24: terminating the call during and/or prior of the establishment of the call channel).

However, Lindsay does not disclose the process of placing a user message (i.e. information) in a spare field of a generated signaling message, including the user message placed in the spare field that initially does not include data, a parameter that indicates that the user message has been placed in the spare field.

Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order

to place information and/or user message in a spare field of signaling message and terminate the set-up of the call channel once the user message has been communicated.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message (Ranta, col. 2 L13-25).

As per claim 11, Lindsay-Ranta discloses the method further comprising storing the reply message in a dedicated memory of the mobile terminal (col. 9 L56 to col. 10 L10; Ranta: col. 6 L3-28).

As per claim 17, Lindsay-Ranta discloses the method wherein generating the signaling message further comprises generating one of a control message and a message for monitoring a plurality of signaling stages included in the attempt to establish the connection between the mobile terminal and the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1).

As per claim 19, Lindsay-Ranta discloses the method wherein the reply message is an acknowledgement message (col. 19 L33-57: ACK message, col. 26 L1-30: ACK messages).

As per claim 21, Lindsay-Ranta discloses the method of claim 10 as set forth above.

However, Lindsay does not disclose wherein the reply message is received in a spare field in a reply signaling message as part of the attempt to establish the connection between the mobile terminal and the external device through the transmission network.

Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a

parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order to place the reply message in the spare field in a reply signaling message.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message (Ranta, col. 2 L13-25).

As per claims 16 and 18, they do not teach or further define over the limitations in claims 1-2, 7, 10-11, 17, 19 and 21. Therefore claims 16 and 18 are rejected for the same reasons as set forth in claims 1-2, 7, 10-11, 17, 19 and 21.

2. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al. (hereinafter Lindsay, US 6,301,242 B1) in view of Ranta (U. S. Patent No. 6,775,259 B1), and further in view of "Official Notice".

As per claim 12, Lindsay-Ranta discloses the method of claim 11 as set forth above.

However, Lindsay-Ranta does not disclose the process wherein the mobile terminal receives a command and responsive to receiving the command, the mobile terminal reading the reply message from the dedicated memory, determining a status indicated by the reply message and if the status is positive, authorizing a payment to be made.

But, the process of receiving a command at the mobile terminal (e.g. retrieve or read command) and responsive to receiving the command, the mobile terminal reading the reply

message from the dedicated memory, determining a status indicated by the reply message and if the status is positive, authorizing a payment to be made, is well known in the art. Official Notice is taken.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay-Ranta in order to receive a command at the mobile terminal to read the status of the sent message and authorize the payment if authenticated successfully.

One of ordinary skilled in the art would have been motivated because it would have enabled the user of the mobile terminal to track the status of the authentication and authorize a payment based on the status.

As per claim 20, Lindsay-Ranta discloses the method of claim 12 as set forth above.

However, Lindsay-Ranta does not disclose the process wherein the user message includes PIN associated with smart card, the determining includes determining whether the status indicates that the smart card was authorized, and the authorizing includes authorizing the payment to be made if the status indicates that the smart card is authorized.

But, authenticating PIN associated with a smart card, the determining including determining whether the status indicates that the smart card was authorized (by checking positive or negative ACK), and the authorizing including authorizing the payment to be made if the status indicates that the smart card is authorized, are well known in the art. Official Notice is taken.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay-Ranta in order to authenticate the PIN associated with smart card.

One of ordinary skilled in the art would have been motivated because it would have enabled the user of the mobile terminal to track the status of the authentication and authorize a payment based on the status.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Owens et al., US 6,338,140 B1: Method and System for Validating subscriber identities in a communications network.

b. Pohjakallio, US 5,502,721: Packet Data Transfer in a Cellular Radio System.

c. Pettersson et al., US 6,304,595 B1: Mobile Telephone Modems.

d. Hameleers et al., US 6,377,799 B1: Interworking function in an internet protocol based radio telecommunications network.

e. Schiefer et al., US 5,884,175: Handover following in a mobile radio system.

f. Clarke et al., Us 5,550,914: Communications Signaling network apparatus.

g. Rosenthal et al., U. S. Patent No. 5,737,701: Automatic Authentication System.

h. Wallenius, U. S. Patent No. 6,466,786 B1: Call setup in Mobile Communications.

Conclusion

The teachings of the prior art shall not be restricted and/or limited to the citations by columns and line numbers, as specified in the rejection. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

In the case of amendments, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and support, for ascertaining the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KAMAL B DIVECHA/

Examiner, Art Unit 2451